

BRIEF SUMMARY OF THE INVENTION

The dual piston concept, utilizing the rigid rockers can be constructed much lighter and smaller, do the same amount of work, using less fuel, and have longer life. Rigid rockers will significantly reduce the cost, increase performance, and reduce the weight of a dual piston engine.

This engine concept may operate using any fuel, Liquefied Natural Gas (LNG) diesel, gasoline, or kerosene.

REFERENCE

1. United States Patent 6,250,263 will reference a few descriptions of this invention which are inferior to the description of my text:

2. Page 2 of 13, paragraph 1, sub-paragraph which reads "at least two cylinders, each said cylinder having separate crank ends, separate face ends and separate central axis."

3. Page 3 of 13, paragraph 11, sub-paragraph which reads "at least two cylinders, each said cylinder having separate crank ends, separate face ends and separate central axes."

4. Page 4 of 13, paragraph 14, sub-paragraph which reads “at least two cylinders, each cylinder having a crank end and a face end.”

5. Page 4 of 13, paragraph 19, sub-paragraph which reads “at least two cylinders, each said cylinder having separate crank ends, separate face ends and separate central axes.

6. Let's compare rigid rockers #7 and #8, to the crank assembly of United States Patent # 6,250,263 and United States patent # 5133306, Fig 8. USP#5133306, Fig 8 clearly exhibits three crank shafts, two auxiliary crank shafts located on either side of the main output crankshaft. Neither crank shaft is interchangeable, and are much heavier than the rigid rockers. This particular engine could very easily be modified to encompass the rigid rocker assembly. The engine shown is a two cylinder engine which houses four pistons, this means that four rigid rockers would be required to replace the two auxiliary cranks which would significantly impact the cost of this engine, the weight, and should increase the life of the engine. The overall friction would decrease tremendously, since the rigid rockers Fig 1, 7 & 8 and of my invention do not rotate. They actuate to and fro approximately 45° each direction causing a 360° rotation of the main crankshaft.